Cellulitic Lesion on the Thigh

A 7-year-old girl presented with a 1 week history of progressive pruritus and a burning sensation followed by erythema and edema on the right leg. On physical examination, an erythematous plaque with an urticariform appearance resembling cellulitis was observed on the thigh (**Figure**, A). She was afebrile with vital signs within normal limits. There were no systemic complaints and no analytical abnormalities, except for a C-reactive protein of 6.5 mg/dL (0-5.0 mg/dL). She denied any history of trauma or insect bites. She was on oral amoxicillin/clavulanic acid for 4 days for a presumed cellulitis, but no improvement was observed. A skin biopsy was performed and showed an eosinophilic infiltration in the dermis, dermal edema, and "flame figures" (**Figure**, B). The diagnosis of Wells syndrome was made. Wells syndrome (eosinophilic cellulitis) is a rare inflammatory dermatosis first described in 1971 by Wells.[1] The etiology remains unknown but infection, arthropod bites, hematological disorders, and drugs have been implicated.[2,3] A hypersensitivity reaction has been suggested because of the common association with atopic disorders and the frequent occurrence of peripheral eosinophilia. The clinical eruption is characterized by varying morphology and severity and usually follows a relapsing remitting course (months to years). Typical lesions present as burning sensation or pruritus, as well as localized or diffuse cutaneous erythematous plaques that are mildly tender with progressive edema appearing. Involution of the lesions (within 2 to 8 weeks) with skin atrophy and hyperpigmentation (morphea-like features) are also observed.[3,4] The clinical diagnosis is supported by histopathologic findings of dermal edema, eosinophilic dermal infiltration, and free eosinophilic granules coating collagen bundles—"flame figures." The most effective treatment is oral steroids (prednisone 2 mg/kg per day for 1 week then tapered over 2 to 3 weeks) but cyclosporine and dapsone have also been used with success.[5] Wells syndrome should be considered in the presence of any atypical presentation of cellulitis with unclear source of infection, relapsing erythema of the skin, and lack of response to antibiotic treatment. ■

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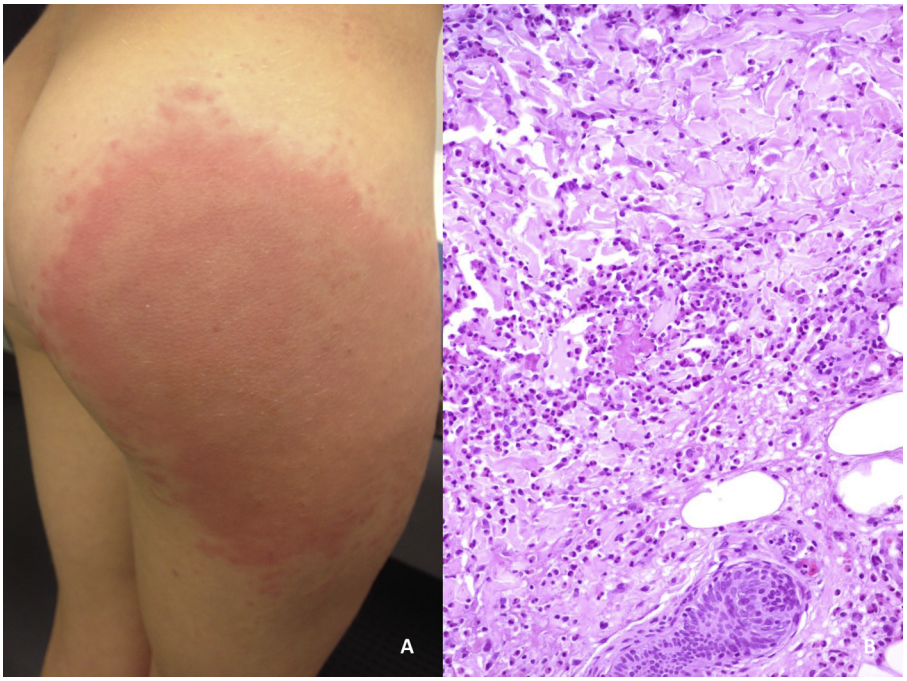

Figure. **A,** Clinical aspect of the lesion. **B,** Eosinophilic dermal infiltration and "flame figures" on the histopathologic examination.

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